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Ustanovka dlya elektroiskrovogo izgotovleniya otverstiy malogo diametra.

SOVIET UNIT FOR ELECTRIC-SPARK MANUFACTURE OF SMALL-DIAMETER HOLES

The LV-14 electric-spark unit is intended for producing 0.1-1.5 millimeter diameter holes in metal.

This unit is suitable for various purposes such as producing holes in diesel injection nozzles, for the manufacture of dies made of hard alloys and tempered steel, and in some instances for producing holes in malleable and hard metals which are difficult to drill by mechanical means.

The LV-14 electric-spark unit is a bench-type model and incorporates the following: a control panel, a vibrator head, a straightening device, and an elevating tank for the liquid dielectric. Its box-like base serves as a housing for the control panel. The upper plate of the control des supports a standard on which the vibrator head, straightening device, and elevating tank are mounted.

The unit is supplied from an alternating-current line with a frequency of 50 cycles per second and voltage of 110-220 volts.

The electrical circuit is divided into two parts, one located inside the control desk and the other outside. The circuit consists of a basic electrical circuit and two auxiliary circuits, one for supplying the vibrator electromagnets and the other for the straightening device.

The maximum power required by the unit is 155 watts; power required for the straightening device, 85 watts; and power required for the vibrator, 5 watts.

A wire made of IS-59 Muntz metal (a copper-zinc alloy) is used as the cathode.

Electric-spark processing of small-diameter holes is done in kerosene.

The unit has the following dimensions: width of base, 320 millimeters; length of base, 430 millimeters; height of unit, 920 millimeters.

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